## RID (Rule Interpretation Decision)

(Use additional sheets as necessary)

Type of RID **Customer RID** Internal Staff RID

Requested Response Time DSD Assigned RID # 076

24 hours

5 working days

As time available

1. Project Name: Small Wind Energy Systems

2. Project Number: None (Plat #. Zoning Case #, etc.)

3. Project Street Address: None

(If not available nearest intersection of two public streets)

4. **Applicant-Name:** Abel-Garcia (Citizen)

5. Applicant Address:

6. Applicant Telephone #:

7. Applicant e-mail Address: N/A

8. Rule in Question:

Establishment of small wind energy systems within San Antonio City Limits.

9. Applicant's Position:

(Including date position presented and name of city staff point of contact)

Date: 8/25/2008

Contact: n/a

Contact Telephone #: n/a

Government grants have been awarded to create small wind energy systems however the UDC is silent on this subject.

10. Staff Finding:

(Including date of finding and name of city staff person formulating finding)

Date: 8/26/2008

Contact: Andrew Spurgin

Contact Telephone #: (210) 207-8229

The Unified Development Code and Building Code do not address wind energy systems. Recent changes the nation's energies markets and local energy rates have increased the appeal of alternative energy sources in our community. A policy is needed to provide consistency for customers, protect neighborhoods and create minimum standards of health, safety and protection of the public welfare. The Planning & Development Services Department has consulted with the U.S. Department of Energy, the American Wind Energy Association, CPS Energy, COSA Environmental Services and examined ordinances from other jurisdictions to identify standards for the development of small wind energy systems.

## 11. Staff Position:

(Including date position presented internally and name of city staff person formulating position)

Date: 8/26/2008 Contact: Andrew Spurgin Contact Telephone #: (210) 207-8229

Federal programs have established procedures for interconnecting renewable energy generators of under 100kW capacity. These small wind energy systems, as opposed to large commercial wind farms, are unique and need to be addressed by a policy. The purpose of this RID is to provide standards for small wind energy systems consisting of a wind turbine, a tower, and associated control or conversion electronics, which has a rated capacity of not more than 100kW and which is intended to primarily reduce on-site consumption of utility power.

12. Departmental Policy or Action:

(Including date of presentation of policy or action to the applicant, the effective date of the policy or action, schedule for pursuing an amendment to the code if required and signature of the Director of Development Services)

Date of policy/action: 8/26/2008 Effective Date of policy/action: 8/26/2008

The Director concurs with the staff recommendation to create a policy for Small Wind Energy Systems and directs the issuance of RID 076 as follows:

(a) Site development standards:

1. Setbacks: A fall zone setback shall be established at a distance of 1.25 times the height of the tower from any property line, right of way, access easement, fire lane, sign, overhead utility or from another tower used for a small wind energy system. For example, a 100 foot tall tower shall be set back 125 feet from the property line or any overhead utility lines. No part of the wind system structure, including guy wire anchors, may extend closer than 10 feet to the property boundaries of the installation site. In lieu of the minimum setback distance, a no-build easement may be acquired from adjacent properties to fullfill the distance requirement.

2. Minimum lot size: A minimum of one-half (1/2) acre is required for use as a small

wind energy system.

3. Heights: Minimum ground clearance of 12 feet for rotor blades or airfoils. For properties less than two acres, total height shall be limited to 80 feet. For properties greater than two acres, there is no limitation on tower height except as imposed by the Federal Aviation Administration (FAA).

4. Subdivision: A property used solely for wind energy shall not be required to plat,

however a building permit is required.

- 5. Lighting, including lighting intensity and frequency of strobe, shall adhere to, but not exceed requirements established by the FAA.
- 6. Signage shall be limited to appropriate warnings and turbine manufacturer and owner on nacelle. Additional signage is prohibited.

7. On-site power lines shall be buried.

8. Noise: Small wind energy systems shall not exceed 50dBA, as measured at the closest neighboring inhabited dwelling. The level, however, may be exceeded during short-term events such as utility outages and/or severe wind storms.

(b) Permitted use:

Small wind energy systems shall be permitted ("P") by right in the following zoning districts C-3, L, I-1, I-2, MI-1, MI-2, O-2, ED, FR, QD and SGD. Small wind energy systems shall require specific use authorization ("S") in all residential base zoning districts and neighborhood preservation districts as well as the following districts: NC, C-1, C-2, O-1, D, RD, UD, MH, MXD, FBZD and TOD.

## (c) Submittal requirements:

A building permit is required. Plans shall contain the following:

1. A plot plan, drawn to scale, of the property indicating the location of all structures, the proposed location of the tower, the distances of the tower to structures on the property as well as distances to the property lines as well as any roads, electric lines and/ or overhead utility lines.

2. A description of the number, type, name plate generating capacity, tower height, rotor diameter and total height of all wind turbines and means of interconnecting with the electrical grid.

- 3. Drawings or blueprints of the tower and the tower footings in conjunction with the application for building permit for a wind system.
- 4. Structural engineering analysis of a tower and its foundation.

5. Manufacturer's recommended installations, if anv.

Documentation of land ownership and/or legal authority to construct on the property.

## (d)Compliance with other regulations

1. Coordination with the Federal Aviation Administration (FAA) required if a tower is taller than 200 feet or within 3 3/4 miles of a commercial runway regardless of height. If such cases, all required forms shall be submitted to the FAA, from which they will make a determination as to whether there will be any restrictions placed on the tower or its location.

2. Building permit applications for small wind energy systems shall be accompanied by a line drawing of electrical components in sufficient detail to allow for a determination that the manner of installation conforms to the City's adopted Electric Code. An electrical inspector will inspect and approve of the system before it is allowed to

3. Interconnection with CPS Energy is required. No small wind energy system shall be installed until evidence has been given that CPS Energy has been informed of the

customer's intent to install an interconnected customer-owned generator.

4. An engineer shall certify that the wind turbine does not interfere with any electromagnetic telecommunications such as radio, telephone, microwaves or television signals.

5. The City of San Antonio shall not enforce any deed convenants or restrictions

regarding wind turbines or generators.

(e) Discontinuation

A wind turbine shall be considered abandoned after 1 year without energy production. The property owner shall remove the wind turbine within 90 days of abandonment.

In addition the director instructs the staff to forward the provisions of RID 076 as a future amendment to the UDC.

Roderick Sanchez, AICP, C.B.O

Director Development Services Department